

The Medical Times and Register.

VOL. XLI. NO. 4

PHILADELPHIA AND BOSTON, APRIL, 1903.

WHOLE NO. 1028.

.....EDITORS.....

FRANK S. PARSONS, M. D.,

JOSEPH R. CLAUSEN, A. M., M. D.,

DORCHESTER, BOSTON, MASS.

2000 MARKET STREET, PHILADELPHIA, PA

.....ASSISTANT EDITORS.....

T. H. MANLEY, M. D., New York, N. Y.

W. H. WALLING, A. M., M. D. Philadelphia.

J. A. TENNEY M. D., Boston, Mass.

A. J. DAVIDOW, M. D., Troy, N. Y.

.....BUSINESS MANAGER.....

J. ERNEST PAXSON,

PARKESBURG, PA

THE SECOND SIGHT.

BY W. R. D. BLACKWOOD, M. D., PHILA.

If anyone had been foolish enough fifty years ago to say that he believed in hypnotism, or that he thought that one person could influence another through the mind or brain-power that man would have been denounced as a lunatic or a sharper. Telepathy was not then known, and even now-a-days many people do not believe that thought transference or allied mental phenomena have any place in the affairs of everyday life, at least in the ways of persons of well-balanced minds or intellect. Theoclymenus in the *Odyssey*—a prophet by descent—and a clansman of Melampus claimed to see bodies or faces of dead whom he knew in life or whom others knew, and visions were and yet are prominently believed in by Icelanders and Highlanders who are descendants of the Vikings of olden times and who were steadfast adherents of second-sight and telepathy. These people were simply the forerunners of many who believe in second-sight now, and

despite the objections and sneers of so-called philosophers and scientific men we are confronted with many stubborn facts which cannot be easily explained. Having had quite a discussion recently with some professional friends who look upon all such matters as either frauds or the hallucinations of illy-balanced minds. I gave to them some facts which have come under my own notice, and which are beyond dispute—numerous witnesses being able to confirm each point described except in a single one which happened to myself, and which is not very material anyhow. These gentlemen have asked me to publish my observations as interesting if not instructive, and I do so, simply saying in beginning that I am not at all superstitious or possessed with a leaning toward the occult or marvelous. Tracing both the Blackwood and Douglas families backward beyond nine hundred years in an unbroken line of ancestry, I am able to say that no insanity, epilepsy or other mental disease has ever prevailed amongst us at any time. There have been instances of sonambulism in our history—one in that of a brother of mine now deceased,

but he never did any harm to anyone in his travels while asleep, and our folks from all the way backward have been reputable—many of them religious beyond ordinary capacity, for we have given to the ministry many well-known preachers, usually Presbyterians or Episcopilians, and all have attained to high esteem—such as being bishops, etc. On the Blackwood side many have been diplomats—most of them—and on the Douglas (my mother's line,) nearly all served in the army or navy of Great Britain. Two-great-great grandfathers were major generals in the Continental army of this land.

The first instance of second-sight noted is that of a cousin who seventy years ago was a quiet young student and who awoke one night from a peaceful sleep after dreaming that he took a ticket in a lottery which at that time was legal, I believe, in Ireland. He was opposed on principle to such chance-takings, but having gone to sleep after shutting the inside blinds to keep out the bright moonlight which shone on his bed he again dreamed about the same matter and noted the number of the ticket to be the same as in the first dream. He looked at his watch and once more went to sleep to again dream of the same ticket with the same number. This time he wrote down on the blind which had blown open the number of the ticket dreamed about, and on arising in the morning there was the writing on the blind. It may be thought that he simply dreamed that he had three or two dreams, but his closing the shutters the first time, his looking at the watch the second time and his writing the number down the

third time looks as if he really did dream thrice. Anyhow, (and this is the important part of the thing as happened to him,) he set aside his scruples and bought the number dreamed of—and drew the grand prize—quite a good, one, too, and thereafter he was dubbed “Lottery Harry.” My father, the late Rev. Dr. William Blackwood, was personally cognizant of the circumstance, which was before my advent to this mundane sphere. I don't know what Harry did with the money but he became a fine preacher in time, and probably did nothing more in lotteries. The place where this happened was one of our family residences, and the castle is the seat of the well-known to all Irishmen and women—the “Banshee.” This “Banshee” is said to give forth a wail at the moment of the death of any member of the family in its direct branches—not the members by marriage—but only of a Douglas born, and on the event of the death of an uncle, an aunt and my mother, all of whom were Douglas' the wail was heard as stated by many persons who testified to the fact although the first two deaths took place a hundred miles from the castle, and my mother's some three thousand miles afar—she dying in this city. None who heard this cry knew of any death till afterward—they simply knew that a Douglas was gone, and in the instance of the brother and sister I heard my relatives speak of the wail which they heard, and letters are yet extant asking who died when my mother passed away.

The second event is that where a sister of my own awoke from sound sleep and arousing the family told them that I was killed in battle, and

she described with absolute accuracy the surrounding country and the ground where the supposed calamity took place—she never having during her life been in Virginia. Her narration of the struggle was strictly correct as it occurred—the only point wrong being that she saw me fall, as she believed me dead, whereas it was either one of three other men who had attacked me. This is what transpired:

At the battle of "Poplar Springs Church," near Petersburg Va., on September 30, and October 1, 1864, I was asked by the general commanding our line to carry a message to another part of the field some two miles away, and in the intense darkness of midnight in the woods I lost the proper path and got inside the enemy's picket lines. Without notice I found myself grasped by the right ankle by a Johnny—another had my bridle in his hand—whilst a third drew a bead on my head and ordered me to come down! Quicker than this describes it my orderly shot the fellow who had me under line and drawing my dress sword which I rarely ever wore, I slashed the Reb who had my bridle-rein across the top of his head, and then pointing in tierce I drove the blade into the solar-plexus of the chap holding my leg. The first one dropped stunned, I think, but anyhow he sat down—not 'way back—but just there—and the leg one had no further interest in the scene, for my hand jammed right up against his stomach—then we skipped away and edged toward our lines as best we could in the blackness. The laparotomy case was wound up for good. As to the others I don't know, although I guess the orderly being a good shot, got his man

potted also. Now, I had no idea whatever as to how the ground looked until next morning—it being just after midnight when the fracas set in, but my sister saw the whole affair clearly and her letter reaching our headquarters two days afterward told the story eloquently and correctly all except my being shot down, and, considering that she never saw a battle and only dreamed or *saw* this on arousing from deep sleep, she may be excused from confounding the men who fell—five being concerned in the scrap—three of whom dropped either dead or out of work for the time being. We often talked the thing over when I got home and her sight of the field of action was photographic in its distinctness.

The third instance of second-sight eventuated three years after the war closed whilst I was stationed in Alabama on a line of railroad with a company of infantry. I was fond of running the trains when the engineers felt lazy and I liked to run fast too. One day we had a terrible storm and all communication between us at headquarters and the southern division of the road was severed. In the evening the superintendent ordered a train of an engine and two cars to go down and see where the main trouble lay, and the master-mechanic went as engineer. Being quite sick he asked me to go with him on the engine and to run it, which I did. Now I did not know the line at all as to the direction we went, although I did know it northerly as well as any man in the company. Remember that I liked fast running when allowed to do so—and as the line was perfectly clear for more than a hundred miles we had every chance to make time as we chose. Well! soon after

leaving the station our headlight was blown out by something striking the glass and we ran in cimmerian darkness ahead of us for about an hour. What the matter with me was I don't know, but I could not keep speed up beyond a few miles at a time. I mechanically shut off steam a little at a time till we were going very slowly and this woke the engineer up (he was sleeping on the other side of the engine) and he would ask me what was the matter? I told him I did not know, but I had a disposition to run at all although I was not a particle afraid of the darkness or because I did not know the road. I had often run before in darkness and over strange sections on that road. I would whoop her up for a while, but soon she would slow up enough to awaken Steve. After doing this half a dozen times I asked him just where we were and looking out as best he could in the drizzle and wind he told me—so and so. Shortly after this we ran into a deep rock cut with water up to the grate-bars, and the steam sizzled around us as the water touched the hot fire above the ash-pan. Going a few miles more I got wretchedly nervous, and I shut down altogether and told the engineer that I would neither run farther nor stay on the engine. He could pick me up when the train returned from down the road. The conductor and other hands came forward to see what was wrong, and why we stopped, and Steve told them. We found that only the front glass of the headlight was broken and the fireman lit up and slowly the train was run down the track—all hands stepping along the ties ahead through the

splashing water which just escaped covering them. Now for the inexplicable part of the history. Just before I shut off the steam we had been running very fast—not less than fifty miles an hour, and this rate if kept up one minute after I shut down would have carried us nearly a mile beyond where we stopped. The rails shone before us like two lines of silver illumined by the lights from the engine and lanterns. A hundred and fifty feet from where we stopped the rails were seen to curve aside from the axial line at almost a right angle, and the entire track, bridge and trestle some six hundred feet long was swept away and not a particle of it was ever found again. It went to the gulf a couple of hundred miles south! The great storm had raised the water to a raging flood as happens in a very short time in all southern places. I do not now refer to my own feelings of anxiety or fear, if you call it such—the curious part is this—an example of second-sight, if such phenomena exists at all. A dear friend between whom and myself ties of unusually strong regard existed, was awakened at two a. m. the night when this strange matter transpired in a state of extreme terror, and the family being aroused she told them that she saw me—a man whom she took to be an engineer—a negro—all on a locomotive—this followed by two cars, one of which was a baggage-car—thrown into a torrent of water under which all disappeared! Now the fireman was colored, and as when we had almost stopped the engineer was standing beside me on the running side she was right; the sight of the two cars—one for baggage was likewise right, and

the only discrepancy was that the train did not go overboard. The time was just two a. m. by my watch and that of the conductor, allowing about three minutes for difference in longitude, she being in Philadelphia. Telegrams between us next day straightened the fears of each, and subsequent letters drew a parallel of actual sight—the one at the scene of imminent disaster, and the vision when the seer awakened so many hundred of miles away! My friend says she did not dream the event—she awoke in terror, and *after* being wide awake the vision came to her.

Many years after the death of my mother whilst sitting musing one night in the library, and whilst perfectly wakeful as testified to by others in the room, I saw the distinct form of my mother sitting some twenty feet from my position. With an absolute disbelief in supernatural visions I saw this as plainly as I see the type before me now as I write. I make no comments on these very curious phenomena beyond saying that each of them is beyond contradiction—they assuredly occurred as briefly stated herein.

AN EFFECTIVE TREATMENT FOR SEPTIC ENDOCARDITIS.

BY PROF. K. F. WENCKEBACH, DIRECTOR OF UNIVERSITY MEDICAL CLINIC AT GRONINGEN, HOLLAND.

(Translated from *Therapie der Gegenwart*, Berlin, February, 1902.)

Increased attention has been paid to septic endocarditis during the last few years, probably because bacteriological investigation has tended to show the relationship of the various cases to one

another. The fact that pathogenic micro-organisms can almost always be cultivated post mortem from the endocardial excrescences and ulcerations, and often even from the "patient's blood during life, is of the utmost importance, and has been confirmed from the most varied sources. The labors of Litten (1), Henschen (2), Bartel (3), Jackson (4), Lenhardt (5), and many others demonstrate that every endocarditis is probably of bacterial origin. When general infection of the blood occurs during the course of an endocarditis, and the more or less violent symptoms of a septicæmia develop, we speak of the affection as a septic or malignant endocarditis. When inflammatory foci other than those in the pericardium from which the blood could be infected are absent, we must regard the disease as an entirely independent affection; and such cases are being recognized and described with ever increasing frequency. The endocarditis of acute articular rheumatism rarely goes on to general sepsis; and the endocardial inflammation itself usually ends with the termination of the general affection, though it only too frequently leaves incurable defects of the valvular structures behind. But an endocarditis occasioned by other infections rarely runs so comparatively favorable a course; the gonococcus has a bad reputation in this respect; and streptococci, staphylococci, pneumococci, *bacteria coli*, and other micro-

(1) *Berliner Klinische Wochenschrift*, 1899; *Congress für innere Medizin*, 1900.

(2) *Fortschritte der Medizin*, 1901.

(3) *Wiener Klinische Wochenschrift*, No 41, 1901.

(4) *Medical and Surgical reports of the Boston City Hospital*, Vol. XI.

(5) *Münchener Medicinische Wochenschrift*, Nos. 28 and 29, 1901.

organisms are recognized causes of the disease.

In general the prognosis is set down by all authorities as extremely unfavorable, though isolated cases do go on to cure. The more attention is paid to the disease the more frequently will the milder cases be recognized, and the more favorable will be the general average prognosis of the disease. Such cases are those in which the general septic symptoms have but little acuity, and, which, as Lenhartz observes, have a more chronic course; but of course it will hardly be possible to decide whether the malady is really healed, or whether it is merely latent, and is liable to reappear at a later period. The course of the disease depends mostly upon the nature and the virulence of the pathogenic organisms that occasion it; and only in the second place upon the extent and localization of the inflammatory processes in the endocardial membrane.

In every case, however, and even in its milder forms, the malady is a very serious one; and Lenhartz (5) was entirely right a few months ago when, at the conclusion of his excellent article in the *Munchener Medicinische Wochenschrift*, he spoke of the absolute "impotence of medical science." Until now there was no such thing as an

However, the impossible of to-day may be a possibility or even a fact to-morrow; and I have an idea that even now we need not feel quite so powerless as formerly.

The requisite for the cure of an infectious ulcerative inflammation of the endocardium, with subsequent infection of the blood and the entire organism, is an antiseptic that does not in-

jure the blood itself, and which, brought directly into the circulation, is powerful enough to destroy the bacteria living in the vital fluid, and to disinfect the disease focus in the endocardium. The Argentum Colloidale, which Crede has so heartily recommended for septic processes, and which has been placed upon the market under the name of Collargolum, seems to be such a remedy. It cannot only be employed both internally and externally, but in 1 to 2 per cent. solution it can be injected directly into the blood. The exceptionally good results which Professor Dieckerhoff (6) obtained in veterinary practice induced me, even before Crede (7) published the paper read before the Hufeland Society, to employ the remedy by intravenous injection in various cases of sickness. A trial seemed especially indicated in septic endocarditis, where in pure cases the sepsis affects the blood channels only, and other foci, which might possibly be reached only with difficulty, are absent. And the results of the trials were most excellent. Once we have overcome our natural reluctance to inject so opaque a mass into the veins of a human being, we become absolutely convinced of the entire innocuousness of the remedy, as Dieckerhoff and Crede have both claimed.

Reserving less convincing but also favorable cases for a future communication, I should like to recount two cases here, in the hope that the remedy may find emploment in wider circles, and its good effects be confirmed; and also that the indications for its use

(6) *Berliner Thiere ziliche Wochenschrift*, Nos. 12 and 14, 1899 and other places.

(7) *Berliner Klinische Wochenschrift*, No. 37, 1901
(8) *British Medical Journal*, p. 710, 1901.

may be more clearly laid down. For the fact cannot be denied that the remedy is sometimes absolutely ineffectual in cases that would seem to be especially suited for it. We do not as yet know its exact indications. The cases may also serve to direct attention to the non-pyæmial instances of the disease, which still go frequently unrecognized.

Case I.—A boy of fifteen was received into our ophthalmic clinic for parenchymatous keratitis on July 19th, 1901. He was said to have had measles in June. He was strongly built, with normal organs, but with Hutchinsonian teeth.

During the cure of the keratitis the patient had an irregular temperature, up to 39.5 C. (103.1 degrees F.) and complained of attacks of palpitation; he was otherwise hardly sick, but kept to his bed continuously. I examined him during an afebrile day, and found a slight enlargement of the heart to the left, increased but pure cardiac tones, and exaggerated impulse. He was transferred to the medical clinic on August 27th.

The febrile curve from that date to September 16th, corresponds fairly accurately to the quartan type, save that the intervals are not entirely afebrile; and the malarial parasites were absent from the blood during the entire course of the disease. Almost every day the patient had attacks of violent palpitation, the pulse going up to 160 per minute. The provisional diagnosis of a septic endocarditis was confirmed; the development of an endocardial inflammation with mitral insufficiency could be plainly followed with the stethoscope during

the weeks of observation. A systolic murmur at the apex became ever sharper and plainer; the second pulmonary tone was increased and percussion showed extension of the cardiac dullness both left and right. The apex impulse was in the mammary line. The systolic murmur was occasionally accompanied by a flute-like musical sound; this disappeared twice during the course of febrile attacks, but appeared again in a short time. The spleen became swollen; and once the patient complained of violent stitchy pains in that organ. Once there appeared a reddened and painful swelling of the subcutaneous cellular tissue of the right forearm, which disappeared however, in a few days (embolism?). On September 3d, numerous colonies of staphylococcus albus were for the first time cultivated from the blood.

There could be no further doubt of the diagnosis; an infectious endocarditis had developed. From the cardiac focus bacteria were cast off into the blood at fairly regular intervals, causing each time an increase of temperature. During these febrile attacks the staphylococcus pyogenes albus, that has been repeatedly recognized as the etiological factor in septic endocarditis, (Lenhartz (5), Symes (8)), could be cultivated in abundance from the blood. The site of entrance of the infection remained unknown; and it could not be positively decided whether the patient had really had measles or some other infectious disease or not.

I do not think it right to delay the injection of the Colloidal Silver any longer. On the forenoon of September 17th I therefore injected 12.5 milli-

grams (1-5 grain) of the metal into a superficial vein of the arm in the form of a 1 per cent. solution of Argentum Colloidale. During the next few days 24 to 30 milligrams (1-3 to 1-2 grain) were injected at a time on nine separate occasions. No unfavorable reaction was ever observed. From the time of the first injection the fever disappeared. A diminution in the violence of the palpitation was soon noticed. On October 4th, 7th, 10th and 13th, the patient had short but acute febrile attacks accompanied by mild bronchitic symptoms; eight further injections were given, and the fever disappeared and did not return after the last date. From that time also the endocarditis improved until only traces of it remained; the palpitation lessened; the systolic murmur became weaker; the cardiac hypertrophy retrogressed; the patient took on flesh with extreme rapidity; and he left the clinic cured on the last day of December, 1901. No other medication was employed; and nothing special need be said of the usual hygienic and dietetic measures, including bodily rest, that were ordered.

Case II.—Female nurse, twenty-one years old. Had formerly been very strong and in blooming health. Her friends noticed that she began to look very pale about the beginning of November, 1901; she complained of palpitation on going up stairs, and felt progressively worse; but she continued to work. She then sprained her ankle and contracted a small paronychia of one finger, both of which healed normally. Finally, on December 19th, she took her bed. At first once a day, but from December 24th twice, she had

a marked rise of temperature. When I first saw her on December 29th, I found her in a restless, subdelirious condition, extremely anaemic, and with a dry tongue. Her pulse was 118. Of pulmonary lesions, which were said to have been present, there was no trace. The heart tones were weak, the first aortic sound was prolonged and not quite clear, and percussion revealed a slight cardiac enlargement to the left. On the back of the hand there was a dollar-sized, reddened swelling, which was disappearing; over the right hip was a large, painful, red and doughy swelling; both these disappeared, however, in a few days (emboli?).

Although swelling of the spleen could not be proved by percussion, and palpation was not satisfactory on account of the rigidity of the panniculus adiposus, and in spite of the fact that the bacteriological examination of the blood that was at once made proved negative, there could be no doubt of the presence of a septicæmia; and, in the absence of other demonstrable foci, a localization in the heart seemed probable. It did not appear permissible to wait for further blood examinations, or for the development of indubitable signs of endocarditis. So on the afternoon of December 30th, the patient's temperature being 37.2 degrees C. (99 degrees F.), 50 milligrams (3-4 grain) of Collargolum in a 2 per cent. solution was injected into one of the veins of the arm; and the process was repeated next morning. No further injections were given; for the remarkable result of these two was an immediate cutting short of the fever. Improvement began immediately after the first injection. The patient

recovered entirely, and seems to be perfectly well now.

These two cases show that in Argentum Colloidale Crede we possess an extremely active blood antiseptic, which is quite innocuous to human beings. It should more especially be employed early in septic endocarditis, a malady for which we possess no other effective remedy. Nor do I see why it should not be tried upon the occurrence of the first symptoms of endocarditis in the course of an acute rheumatism, to prevent the further extension of the process; for here also we must assume the existence of a bacterial inflammation of the endocardium, which can be cut short by a timely destruction of the micro-organisms.

I shall not refer here to the other diseases in which the remedy has proven useful or is likely to be of value. But a word as to the action of this remarkable remedy may be in place.

Crede believes, if I understand him correctly, that the silver is active in its metallic form, or in the form of salts formed by union with some of the tissue fluids. Exact experimentation as to the nature of its bactericide action must enlighten us upon this point; but I would call attention to the fact that we are dealing with a very peculiar body both from a physical and chemical point of view. The colloidal metals are ranked among the "inorganic ferments." Colloidal platinum especially is a powerful catalyst; that is to say, reactions that are usually excessively slow or even hardly noticeable, take place with lightning-like rapidity in the presence of even minute quantities of it. It is in this peculiar property of the colloidal metals that to

my mind gives the greatest importance in biology and therapy to these substances. Very finely divided but non-colloidal particles of silver do not have this curative effect in the blood. My own observations in other cases show with great probability that extremely minute quantities, as 5 milligrams (1-12 grain) show full effects in circulating fluid that must be measured by quarts. Hence it is probable that Colloidal Silver acts as a catalyst in the animal body; that by its presence the normal but inadequate bactericide properties of the blood are enormously increased. This would also explain the manner in which the Colloidal Silver rubbed into the skin in the form of ointment is capable of exerting a favorable influence upon the most varied disease conditions. That, as experience teaches us, the inunctions or injections must often be repeated, does not militate against this explanation; for it is well known that the material in question is very rapidly excreted out of the body again.

As I have said, experimentation only can enlighten us as to the exact nature of the curative effect exerted by the remedy. Other catalysts may be found; and such experimentation promises great things for the future development of our therapeutics.

The *devil* is not now quite so necessary to theologians as he once was, but he still heads the wavering and decimated hosts of the mythologists. Instead of a distinct entity he is now held to be a symbolic embodiment of the whole D family, *debt, dirt, divorces, darkness and death*.—*The Dietetic and Hygienic Gazette*.

THE MEDICINAL TREATMENT OF PULMONARY TUBERCULOSIS.

DR. GEORGE D. BARNEY, BROOKLYN, N. Y.

After reviewing the therapeutic treatment of phthisis, the author concludes that, with a very few exceptions (compounds of creosote and guaiacol and cod liver oil), it is totally ineffective. Change of situation to a dry climate is, generally, only a temporary arrest of the disease; the sufferer as a rule finally succumbs, or, at best, ekes out a miserable existence away from home and business interests. In a few instances cure seems complete; but even then it is the rare exception that the individual is able to return to his home.

The expectations of the profession from serums have not been realized. They have not only failed to act as curative agents, but in many instances have proved to be positively injurious.

In 1894, while working with Professor Edwin Klebs in his laboratory at Asheville, the author, noting the improvements which sometimes follow the inhalation of various organic compounds in vapor form, began a series of experiments with the same which have lasted until the present time. The results achieved with the drug in the combination now in use have been so remarkable that they are deemed worthy of publication.

The antiseptic in question, trikresol, is best used in a solution with ethylenediamine, sold under the name of kresamin, which contains 25 per cent. of each of the two drugs. The reasons for selecting this preparation as the most eligible one for the purpose will be given later on.

Trikresol is a mixture of the three

creosols, chemically pure, possessing three times the antiseptic power of carbolic acid, and having but one-third of its toxicity. It can therefore be used in solutions nine times as strong within the limits of safety. Tubercle bacilli immersed in a six per cent. solution die in a few seconds.

The first experiments were carried on with a six per cent. solution of trikresol, made with the addition of sufficient alcohol to permit of the admixture of the necessary amount of water, enough glycerin being added to allow it to be used in a nebulizer with or without the aid of the pneumatic cabinet. Inhalations of from two to fifteen minutes were given, some daily, some every other day, and some twice weekly, without making any special selection of the cases, and a careful microscopical examination of the sputa made in order to observe what effect, if any, the antiseptic had upon the bacilli. As a matter of course, the results varied more or less in proportion to the severity of the disease and the amount of recuperative power of the patient.

In general, it may be said that after a brief period of treatment (usually no later than the beginning of the third week), the bacilli showed some changes of form, as observed under the microscope. First the edges become somewhat irregular and the corners lose some of their angular outline. Then they assume more or less of a dumbbell shape bulging out at the ends and thinning in the middle. This process continues until they split in two and their fragments gradually disintegrate and disappear. Coincident the sputum presents modifications evident to the naked eye. Originally thick, tenacious and heavy, it becomes thinner and less

disposed to retain its shape when immersed in water. The masses become smaller and the greenish color so often observed fades into a light gray. Before the treatment is finished, the expectoration is decidedly frothy and completely soluble; finally it ceases altogether. This is the regular course in all favorable cases.

As might be expected from the introduction into the system of a remedy so destructive to disease germs, a favorable effect is obtained in a comparatively short time. At the expiration of a week or ten days, the patient notices a change for the better. The chilly sensations diminish and the fever which invariably follows them is lessened in severity. As the treatment progresses, the strength increases, breathing becomes easier, and the racking cough becomes gradually less violent, though it is, as a rule, the last of the symptoms to disappear. The patient gains in weight, and his general appearance shows a decided improvement. Complete restoration to health is the rule in nearly all cases of the first stage, and many in the second. Indeed, not a few in which the disease had progressed still farther have fully recovered under the treatment.

Trikresol is, however, acid in reaction, and hence is more or less irritating. In the endeavor to obviate these and other objections, several preparations were tried, but without satisfaction until Kresamin, an alkaline watery solution which may be diluted without precipitation of any sort was employed. The vapor it gives off is singularly unirritating; it may be used as strong as 32 and even 36 per cent. Thus far, however, it has rarely been

deemed necessary to administer it in greater concentration than 25 per cent. Furthermore, the ethylenediamine is especially valuable because it dissolves mucous and pus and all albuminous matters. The tubercle bacilli are lodged upon the surface of the air cells and the membrane is covered with a thick exudation characteristic of inflammation. A cavity exists, the walls of which are covered with pus and broken down material in which a variety of germs besides that of specific disease are rapidly multiplying. Were it to be treated surgically, the first measure would be to cleanse it thoroughly and then apply the antiseptic. This, in a measure, is what the ethylenediamine accomplishes. When the lung is consolidated, the tubercle bacilli are imbedded in a thick mass of albuminous matter, which gradually advances from cell to cell as the disease progresses. Trikresol applied to the outer portion of the solidified area does much good; but an agent which dissolves the exudate and allows a freer access of the antiseptic to the cause of the trouble, materially hastens the process of germ destruction, which is the object of the treatment.

While the vapor can be used with good results in the ordinary nebulizer, the pneumatic cabinet is an invaluable adjunct. The rarefaction of the air within the cabinet while the patient is inhaling the vapor at the usual atmospheric pressure causes the lungs to expand to a greater degree than common, and allows the remedy to penetrate much more deeply. This method also obviates the necessity of an effort by the patient to take deep inspirations, which often tire the weak.

Two tables are appended, giving a comprehensive review of 100 cases treated by Dr. Barney. Of 30 cases in the first stage of the disease 29 were cured, 1 remaining unimproved; of 30 cases in the second stage, 19 were cured, 6 apparently cured, 1 arrested, 4 remaining unimproved; 40 cases in the third stage, 8 were cured, 18 arrested, 3 improved, 11 remaining unimproved.—*Abstracted from The Medical Examiner and Practitioner*, Nov. 1902.

A BRIEF HISTORY OF THE THERAPY OF VARIOUS FORMS OF LIGHT AND RADIO-THERAPY.*

BY JAMES MACFARLANE WINFIELD, M. D.

Lecturer on Dermatology and Chief of Clinic at the Long Island College Hospital, Etc.
*Published also in the *Brooklyn Medical Journal*.

In the earliest written records of the human race we find reference to the beneficial effects of light.

The worship of the sun is perhaps the oldest form of religion, and those believers made light the great vivifying principle, the chief factor of life, the promoter of health, both mental and physical, while darkness bred disease and death.

In hieroglyphics, antedating the Bible the sun is found figured as the supreme element.

In sacred writings a belief in the life-giving and purifying effects of light is expressed in many ways. Almost the first words in the Bible are "Let there be Light" and chaos and disorder were dispelled by the divine power. Again, "The Prince of Peace" is symbolized as the "Sun of Righteousness who has risen with healing on His wings." The wicked are represented as "loving darkness rather than light,

because their deeds are evil;" and so, throughout the Bible, Light is made the synonym of all good.

The ancient philosophers knew the benefit of sunlight. The shrewd and worldly-wise Diogenes did not take all of his time in the difficult and most disappointing quest for an honest man, but according to Plutarch, spent much of his old age sitting in the direct rays of the sun.

Both the ancient Greeks and Romans were firm believers in the therapeutic effects of the sun bath, and the homes of the wealthy were provided with solaria; the Roman cities had public baths and large sun rooms, for the use of the citizens.

Hippocrates states that old men double their age in winter, when the sun is weak; and in his remarks on fever he directs that those suffering from chills and fever should be exposed to the sun.

Celsus recommends that people with feeble digestions should live in well lighted houses, and advises them to take exercise in the sun and not in the shade. The sun bath is also advised for dropsy, kidney disease and paralysis.

When the barbarian swept away the culture, knowledge and refinement of the elder nations, light was quenched in the well-named "Dark Ages." With the exclusion of light and air from gloomy castles and dingy hovels, health and intelligence went too; cruelty, deformity and disease ran riot, and outraged Hygiene devastated civilization with God's scourge, the plague.

Between the writings of the ancients and those of the fifteenth century,

nothing is found that would indicate that any special attention was given to the effects of light; but in the seventeenth and eighteenth century reference is again found to it as a curative measure.

Humboldt called attention to the effect of light upon the development of animals. He says that "deformities and deviations, from healthy physical development are rare among certain races of men, especially those who wander about naked in the brilliant tropical light; these present none of the deformities so frequently found among those inhabiting a colder climate."

In the early part of the nineteenth century many French and German scientists published theses on the beneficial effects of light upon the human body. In 1848 Perreira, of London, incorporated in his "Elements of Materia Medica and Therapeutics" a chapter dealing especially with the therapeutic effects of sunlight; he calls solar light and heat "the physical but imponderable remedies," and says "Light acts as a vivifying and vital stimulus, promoting development and nutrition."

It is a matter of common experience that smallpox decreases in summer, owing to the free exposure of the apartments to light and air.

Light inhibits and destroys nearly all forms of bacterial life. It is more than probable that sunlight and pure air have more to do with the cure of tuberculosis than altitude or change of climate.

The discoveries of Newton and Frownofer led to the utilization of the various rays of the sun to promote

health and growth, but nothing of especial note was attempted until 1860, when Gen. Pleasonton conceived the idea of growing vegetables and fruits in greenhouses constructed of blue and violet glass, thus excluding the chemical rays. The result of this experiment was embodied in a work published in 1877. Gen. Pleasonton succeeded in producing exceptionally fine fruit, and also accelerated the growth of pigs. His theories were the basis of the introduction of the so-called blue and red glass treatment of disease, and for a few years this method was extolled for the cure of tuberculosis and certain forms of nervous disease.

This fad, for the theory did not stand the light of scientific investigation, soon waned and the hope of curing tuberculosis and neurasthenia by this method was relegated to the rubbish heap of exploded medical fancies.

The next important attempt to utilize modified light was made in 1895 when Finsen, of Copenhagen, advocated the use of red light in the treatment of smallpox. He claimed that if patients were placed under a covering of red cloth or glass convalescence was greatly hastened, maturation rarely occurred, and the scarring was slight.

This treatment was not new, for Finsen simply applied scientifically some empirical ideas of the middle ages, when smallpox patients were covered with red cloths.

The theory upon which he based his treatment is well founded, for, if the chemical, or the most refrangible rays of the sun are not allowed to come in contact with the skin, the integument will not become inflamed; this can be

accomplished in various ways, by the employment of ointments, painting with densely colored paints, covering with veils, etc. The severe *Erythema solare* of the early summer ceases to be troublesome as the season advances, simply because the natural pigment of the skin grows denser on account of the constant irritative action of the sun; the thickened pigment excludes the chemical rays and the tanned skin is rendered immune to all solar effects.

In spite of the good reports of this method of treating smallpox by Finsen and other European observers, the results were not borne out in this country; and now, less than ten years after Finsen made his report, this therapeutic measure is rarely if ever resorted to, especially in the United States.

Although the beneficial effects of sunlight have been known for many thousands of years, it has never been a popular curative measure, principally because the element is difficult to control, and the ill effects of too much sun, often equal, or even exceed the benefit derived therefrom.

When electricity came to be universally employed for lighting and heating, it was at once seen that here was light that could be held under control, and scientifically applied in curing disease.

Electric light has been and is employed as a therapeutic agent in the cure of many diseases, but more especially for those of the respiratory organs. It was thought that tuberculosis could be cured by the penetration of the bactericidal ultra violet rays; further experiments have proven that these rays are not capable of penetrating the skin, and that the blue and

violet rays are absorbed by the blood. It has been demonstrated that while the electric light is infinitely richer in these rays than the sun, it is evidently not this property that works the benefit in consumption and other bacterial diseases, but rather the improvement of the general condition due to the stimulating effect of electricity; for when the body is exposed for any length of time to the strong illumination of an arc light, the skin is stimulated, metabolism promoted, and the general nutrition improved.

In treating pulmonary diseases the patient's chest is exposed to the rays of a powerful arc light or they sit in a room where a great number of incandescent lights are especially arranged around the walls.

In 1898 Finsen, of Copenhagen, published his results of the treatment of lupus by what is now known as photo-therapy (The Finsen Method), *Le Presse Medicale*, No. 58, p. 17, 1898.

Finsen first applied the concentrated sun rays on the lupus spot, by a specially prepared apparatus; while good results were obtained, the sunlight, especially in Copenhagen, was too uncertain. This led to his experimenting with the arc light, and now he and his followers employ electric light almost exclusively. The heat waves are excluded, and the blue, violet and ultra violet beams are directed upon the surface. To make this treatment effective the parts must be rendered anemic, which is done by a specially devised instrument attached to the apparatus.

Finsen's theory seems to have been that the blue, violet and ultra violet rays would act in lupus by inhibiting or killing the bacteria. As is stated

above, the ultra violet rays cannot penetrate the skin, even when derived from electric light, and it is a well-known physical fact that the ultra violet rays of the sun never reach the earth, therefore these rays could have no effect upon lupus; and if the blood is not pressed out of the diseased part, the blue and violet rays will be absorbed, consequently it is essentially important that to obtain any bactericidal effect, the parts must be made absolutely bloodless.

Finsen claims to cure over 90 per cent. of lupus cases, and as this is a common disease throughout northern Europe, the Danish Government has established and maintains a hospital especially for the practice of the Finsen method.

In 1895 Prof. Roentgen of Wurtzburg, Austria, accidentally discovered a new form of electrical energy, which is radiated from a highly exhausted discharge tube actuated by an induction coil or static machine.

Not knowing just what these rays were, Roentgen called them X-rays.

This ray has the property of penetrating certain opaque substances, as, for instance, flesh, wood, leather, paper and most fibrous material; while normal bone is not so easily penetrated, metals absorb the ray.

The first application of the X-ray in medicine was for surgical diagnosis, and photographing bone deformities and fractures.

The first therapeutic application of X-ray was in 1897, when Freund, of Vienna, used it in two cases of hysteric trichosis. In one case the hairs were removed after an aggregate exposure of 20 hours without producing

any dermatitis; in the other, after an aggregate exposure of 44 hours, a violent dermatitis was set up which resulted in necrosis and scarring. This caustic action of the ray followed by destruction of the tissues, suggested to Schiff, of Vienna, the idea of using it in the treatment of lupus.

Simultaneously with Schiff's first San Francisco, published the report of a cure of lupus by the X-ray.

Since then physicians in all parts of the world have used the ray therapeutically.

The ray has a similar effect upon both normal and diseased skin. After a varying period the skin becomes slightly yellow, then red, the red grows darker, and in some people slight irritation and pricking is felt; this in very sensitive persons may become burning and actual pain.

If the exposures be continued beyond this point the skin may blister and ulcerate, constituting what is known as the X-ray burn.

Various theories have been advanced regarding the action of the X-ray; some claim that it affects the bacteria, others that it is an electro-chemical or tropho-neurotic action. But so far it is apparent that no one is positively certain how this unknown quantity produces a cure, unless it be by promoting absorption.

It is but natural that these somewhat similar therapeutic measures, radio-therapy and photo-therapy, should excite a comparison.

The Finsen method is applicable in a very limited range of diseases. It is principally used in the treatment of lupus, the apparatus is expensive and cumbersome, it requires numerous sit-

tings extending over a long period of time; (some of Finsen's cases received daily exposures for over a year before a cure was effected). The application is painful, and it is necessary to have skilled assistants.

The X-ray apparatus is comparatively inexpensive. It is not necessary to have skilled assistants, the treatment is absolutely painless and the range of usefulness is great, for it has been successfully employed in a wide variety of diseases as, for instance, lupus (both varieties), epithelioma, carcinoma, sarcoma, hypertricosis, acne, chronic eczema, psoriasis, etc.

After careful search through the literature of radio-therapy it is safe to assume that over 90 per cent. of the cases of lupus treated by this method are cured. Only two cases have come under my personal observation, both were cured after 12 exposures, and have remained well for nearly a year.

The results in lupus erythematosus do not appear to be as good as those treated by the Finsen light.

Judging from the reports, radio-therapy has a beneficial and curative effect in about 75 per cent. of epithelioma, including rodent ulcer. My experience is about the same.

At present I have under treatment an exceedingly interesting case of epithelioma, in a man 81 years of age. The cancer involved nearly the whole of the under lip. The universal opinion of the surgeons consulted was that it was an inoperable case, because of his age and the existence of a severe and far advanced Bright's disease.

The malignant growth had been aggravated by the application of caustic pastes so that when the ray was first

applied the lip was a foul-smelling, suppurating mass. After the third application the discharge ceased. The ray has been applied 26 times, the average duration of sittings, 12 minutes, and now the disease is practically cured.

The results in carcinoma, especially post-operative, are sufficiently good to warrant the following up of the surgical measure by the X-ray, and from the reports of careful observers radio-therapy should be employed in all cases of inoperable carcinoma.

During the past year I have used the ray in six cases of cancer of the breast, two primary and four post-operative. The first two received respectively four and eight exposures of ten minutes' duration, extending over a period of three months; in the one receiving four treatments the size of the tumor remained stationary, while previously it had grown rapidly.

In the other case the tumor began to diminish in size after three exposures, when she was last seen, it was at least one-half smaller than before treatment. As these patients were hard to control they were finally lost sight of.

In the four post-operative cases one died from exhaustion after only a few exposures to the ray; in one the skin and cicatrix were thickly studded with new growths, after twelve exposures the small tumors had entirely disappeared and the large ones were greatly diminished in size. The patient is still under observation, and although the ray has not been applied for nearly four months the malignant process does not seem to be making any headway.

The third case of inoperable carcinoma is interesting because it shows microscopically that the X-ray inhibits the growth of the carcinomatous cells. Six weeks after operation the patient was referred to me for treatment because of a rapidly growing tumor situated just outside of the cicatrix. The growth was hard and showed unmistakable signs of malignancy; it decreased after eight treatments; then, for unavoidable reasons the exposures were suspended for nearly three weeks. When the patient again presented herself it was found that the tumor had nearly doubled in size, and the overlying skin was inflamed (not, however, an X-ray dermatitis); surgical procedure was advised, and a second operation was immediately done; the growth was found to consist of broken down material and scattered through the adjacent fascia and deeper structures were numerous hard nodules; everything that appeared suspicious was removed and sent to the pathologists without any comments regarding the case or reference to the ray treatment; he reported that undoubtedly the tissues were carcinomatous, but they showed evidences of having undergone some peculiar change, which had stopped the cell growth. A similar observation regarding the power of X-ray over carcinomatous cells has recently been made by Mr. Stephen Mayou, an English physician. My patient is still under observation and treatment, and so far there are no signs of recurrence.

Considerable discussion is now going on regarding the beneficial effect of radio-therapy upon pelvic and abdominal malignant neoplasms; some claim

that the growth of these tumors is stopped, and many times thus disappear altogether.

While on this subject it is well to notice that the X-ray is capable of and does cause absorption, and conservative men have suggested that the use of a powerful ray might produce metastasis of the malignant process; this is a reasonable surmise, and before we advise or use radio-therapy in deep-seated or inoperable malignant disease the case should be thoroughly understood, and all evidences carefully weighed, then if the results are grave we can feel assured that our patient has received the best that medical science can offer, even to the last resort; and the stigma of quackery is removed from a method that is of undoubted value.

Very few authoritative reports are obtainable regarding radio-therapy in the treatment of sarcoma, but from recent observations by Coley it appears upon this form of cancer.

All agree that it lessens, and many times absolutely relieves pain, this, alone would be sufficient to warrant the continuance of this procedure in sarcoma.

I have used the rays in two cases, one of the jaw and the other of the glands of the neck, but neither derived any benefit except relief from pain.

Radio-therapy has been recommended for the relief of hypertricosis. It will remove the hairs, but the treatment must be persisted in for at least two months, with daily exposures of five minutes each. At the end of that time the hairs will have fallen, but after a few weeks of rest many have returned; so to make a permanent

cure it is necessary to continue the treatment for a month or two longer.

It is also used to reduce hypertrophic scars and keloids. I have at present a case of keloid under treatment, in which the hypertrophy is rapidly growing smaller.

Zeisler and Pusey, of Chicago, have reported excellent results in the treatment of acne by the X-ray, but it seems from our present knowledge that this method is scarcely warranted, except, perhaps, in the chronic indurated variety, for we have simpler and better known curative measures.

The results of radio-therapy in psoriasis are still under observation. At the last meeting of the New York Dermatological Society Dr. Allen presented a case of psoriasis which had resisted all of the older methods for treatment. As a control, one-half of the body was exposed to the X-ray and the other was treated with chrysarobin ointment. The part that had been rayed was nearly well; the other side was only slightly influenced by treatment.

In the treatment of eczema it would appear to be particularly applicable to the old indurated variety.

Before concluding it may be well to state that it is undoubtedly true that medical electricity in any form is a happy hunting ground for all sorts of empiricism. Finsen light and X-rays have received their due attention from the ubiquitous quacks. Many of the cases reported by men of undoubted integrity appear miraculous, and it is not surprising that the temperate, accurate physician is led to doubt the authenticity of many of the published observations.

The primary requisite of all scientific report is entire truthfulness. Negative evidence is of as much value as positive. In our eagerness to use this new weapon against disease let us beware of over enthusiasm.

CONCLUSIONS.

1. It has been proven from time immemorial that the sun is a potent hygienic agent, and as medical science advances it is more and more evident that light and air are the great necessities of animal well-being.
2. That the various fads and theories regarding light were the stepping stones to the more perfected methods and understanding of the therapeutic principles of light.
3. That in electric light we have a most valuable therapeutic agent in the amelioration and cure of many chronic and troublesome diseases.
4. That photo-therapy, the Finsen method, is of undoubted value, although limited in its usefulness.
5. Radio-therapy is more useful than phototherapy, because of its wide and easy range of application. Its therapeutic power is so decided that it will continue to be a valuable aid in the treatment of many diseases.

6. This method is capable of producing untoward and grave symptoms. Although it is not necessary to produce an X-ray dermatitis for the cure of diseases, yet this action may occur. Each operator must be a guide unto himself, and no one should attempt to use the ray unless he is fully acquainted with all its possibilities and dangers.

7. That it is better in lupus than the Finsen method because of its simplicity.

8. That in radio-therapy we have a valuable weapon against all forms of cancer; but surgical procedure is preferable if the cancer is small and easy of access.

9. Personal experience and a careful review of the reliable literature on this subject prove that radio-therapy has an inhibitory effect on all malignant growths and that it should be used in inoperable cancer and after removal by surgical means.

NASAL CATARRH, FIBROID AND MUCOUS POLYPUS,

BY J. D. ELY, M. D., TOLEDO, OHIO.

Glyco Thymoline is an improved alkaline antiseptic solution, and is conspicuously superior to any preparations of its class with which I am acquainted.

I have been prescribing it and using it in my practice for some time with such general satisfaction that it is a pleasure to write of its merits.

Glyco Thymoline will be found helpful in all cases of Nasal Catarrh and curative in many, without other medication. The method of using it with the K. & O. Douche is the best I have seen and is never harmful, a fact which can be said of few, if any other.

Children are easily taught to use it properly and perhaps the best results are obtained in treatment of the young. My own family have learned to depend upon Glyco Thymoline and the K. & O. Douche for the relief and prompt cure of acute coryza and the remedy consequently is regarded as a household necessity with us.

I have often been pleasantly surprised and gratified with the cure of both acute and chronic nasal catarrh by the use of Glyco Thymoline alone. Of many cases under observation where pronounced good results were obtained from the use of Glyco Thymoline a few are selected for example and special mention.

Case 1. J. W., age sixty-nine years, came to me for treatment of a fibroid polypus which completely obstructed the left nostril. I injected the growth with a few drops of a dilute tincture of Thuja and expected to repeat the procedure, but it produced so much pain and irritation that I abandoned the idea. I prescribed Glyco Thymoline and the K. & O. Douche by the use of which the patient was relieved not only of the obstruction, but the catarrhal trouble from which he had suffered for many years.

A granddaughter of the above who had catarrh very bad and who was operated on for removal of mucous polypus of the nose and suffered return of the growths as frequently happens, was soon made very comfortable by the use of Glyco Thymoline and believes she will be entirely cured by it.

Case 2. Lena G., age four years, always had catarrh and was never much relieved by any treatment before I prescribed Glyco Thymoline. It promptly relieved and in a short time completely cured her without the use of other means. While I have used Glyco Thymoline chiefly in the treatment of Nasal Catarrh, I have tried it in about all of the diseases in which it is recommended, and found it so generally satisfactory that I have no hesitation in recommending it as an unusually meritorious preparation.

The
Medical Times and Register
 is published monthly.

ENTERED AT the Philadelphia Postoffice as
 second-class mail matter.

ADVERTISING RATES may be had on application
 to The Times Publishing House, Parkesburg, Pa., or to the Philadelphia office, 2000 Market street.

REPRINTS of Original Articles are not furnished
 except on payment of cost price by the author.

SUBSCRIPTION PRICE IS \$1.00 a year in advance.
 Foreign countries, \$1.50. Single copies, 10 cents.

ALL COMMUNICATIONS, reviews, etc., intended
 for the editor should be addressed to 867 ADAMS
 STREET, DORCHESTER, BOSTON, MASS.

THE MEDICAL TIMES AND REGISTER is published by The Medical Publishing Company, 2000 can Market St., Philadelphia, to whom all remitt.

should be made by bank check, or postal, or
 express money order, or to J. Ernest Paxson
 Business Manager, Parkesburg, Pa.

ORIGINAL ARTICLES of practical utility and
 length are invited from the profession. Accepted manuscripts will be paid for by a year's
 subscription to this journal and one hundred
 extra copies of the issue in which such appears
 if desired.

Editorial.

Never pass a catheter or any other instrument into the bladder without feeling that you are undertaking one of the operations in which absolute asepsis is most important, and in which its neglect may bring about the most appalling results. Catheterism must be considered as a procedure requiring as much cleanliness, delicacy and patience as any in surgery, and it is well to realize that, when taken in time, an infection of the ocular conjunctiva is trivial compared to an infection of the bladder.—*International Journal of Surgery.*

FARMING IN THE CITY.

The Sixth Annual Report of the Philadelphia Vacant Lots Cultivation Association for the Season of 1902, is before us, and it presents a most interesting array of facts.

The work was begun at a time when the industrial fortunes of the country were at a low ebb, and it was thought that as prosperity became general the necessity for its activities would cease; but whether this were so or not, the number of acres placed under cultivation has steadily risen, as the following will show:

COMPARATIVE STATEMENT OF RESULTS 1897-1902.

YEAR	No. Acrs.	No. Gardens	Persons Affected	Total Product	Average Product Per Gard.	Total Cost	Cost Per Garden
1897	27	100	528	\$6,000 00	\$60 03	\$1,825 33	\$18 25
1898	40 1/2	162	775	9,700 00	59 87	2,266 76	14 00
1899	73	292	1,495	14,810 80	49 35	2,650 30	9 07
1900	130	520	2,386	24,800 00	47 30	3,962 48	7 62
1901	158	632	2,946	30,000 00	47 46	4,480 94	7 09
1902	198 1/2	794	3,775 5	\$10,000 00	62 80	5,556 86	7 00

With the enormous influx of and increase in population in the cities, especially of the more undesirable classes, the work of this society becomes of vital interest to the thoughtful citizen.—"The already over-crowded conditions must in many cases be relieved, or retrogression and degeneration in our civilization must result.

"The only remedy yet proposed with any considerable unanimity of opinion is, 'back to the land.'—When the growth of vacant lot gardens in this and other cities is considered, is it too much to suggest that probably this farming in the city may be made at least one of the avenues by which

the people may be led 'back toward the land.'

The report is very valuable and instructive and will well repay a careful study by all Sociologists.

Copies may be had by addressing the superintendent, Mr. R. F. Powell, 14 South Broad St., Philadelphia. We heartily commend the work to our readers, and ask their cooperation in such way as may be most congenial to them. Contributions may be sent to the Treasurer, Mr. N. B. Crenshaw, Girard Trust Co., Philadelphia.

W. H. W.

GREEN DRUG FLUID EXTRACTS.

BY C. S. CHAMBERLIN, M. D. CINCINNATI.

Fashion changes in medicine as in other matters of less moment. LeSage caricatured the physicians of his day when he made Dr. Sangrado, of Valladolid, say in the course of his instructions to that apt medical student, Gil Blas: "I will immediately disclose to thee the whole extent of that salutary art which I have professed so many years. Other physicians made this consist in the knowledge of a thousand different sciences; but I intend to go a shorter way to work, and spare thee the trouble of studying pharmacy, anatomy, botany and physics. Know, my friend, all that is required is to bleed the patients and make them drink warm water. This is the secret of curing all distempers incident to man."

The unfortunate sick of a century ago who survived the lancet were still in danger of being exterminated by calomel and jalap in teaspoonful doses. At a later date the medical nihilist developed, and from over-dosing the

fashion veered to under-dosing, or no dosing at all. Later organic therapy was proclaimed as the discovery that should conquer "all the ills that flesh is heir to," and so noted a savant as Brown-Sequard thought that he had at last discovered the fountain of youth. Official surgery, that "truly asinine philosophy," as Gould has named it, for a time appealed to many of the weaker brethren. Then we went serum mad, and were ready to "throw physic to the dogs," and now the Lord only knows where the X-rays will lead us. But through all this tangled skein of folly has run a strand of common sense. There have always been a few level-headed ones who recognized and separated the grains of wheat from the mass of chaff, and, thanks to them, the use of the lancet will always be good practice in sthenic conditions in plethoric patients; minute doses, oft repeated, of such drugs as calomel are acknowledged to yield more satisfactory results than massive doses of the same drug. The marvelous achievements of thyroid medication in cretinism cannot be gainsaid, while the diphtheria antitoxin has so reduced the mortality of that dread disease that we perhaps are resting in a sense of false security.

Pharmacy has likewise been evolved from a succession of fads. From the crude decoction to the use of the active principle only, is a long journey, and there have been important stations by the way. For years the fluid extract held undisputed sway; the sugar-coated pill became popular, only to yield pre-eminence to the gelatin-coated pill and capsule. There was a time when elixirs only were fashionable, and therapeutic efficiency was often made to

yield precedence to pharmaceutical elegance. Then came the tablet, and every drug, no matter what its physical properties or mode of action, must be prepared in that form.

Here, again, we have been saved by common sense; the decoction from fresh herbs is still employed, but only in those cases in which the medicinal properties are soluble in water alone; the sugar and gelatin-coated pill are reserved for those medicines which should be preserved in soft mass; the capsule is invaluable for powders given upon extemporaneous prescriptions; while the soluble perle cannot be equaled for the easy administration of unpalatable oils and resins; the elixir also will be preferred for fastidious patients in whom aromatics are not contraindicated. So far as vegetable drugs whose medicinal constituents are soluble in alcohol are concerned, however, the fluid extract will always remain the most eligible form for the exhibition of their curative properties.

Theoretically, it may be claimed that the active principle represents all of the medicinal value of the drug, but practically—and it is practicable results which are demanded at the bedside—this is not true; the intimate and subtle association of all the constituents of the drug so modifies the action of each that they are much more effective in combination than in any one of them singly. Art in this instance does not improve upon Nature.

In order that the fluid extract may represent the drug at the height of its medicinal value, it is essential that the drug should be gathered at the proper time, that it should be properly stored; this involves in certain instances its

immediate extraction or its preservation in alcohol. Some drugs suffer no deterioration if properly dried, and under proper conditions may be kept indefinitely. Others, while not injured in the drying process, are so subject to the ravages of insects and worms that they soon become filthy and unfit for medicinal use. Others, again, contain certain volatile constituents upon which the therapeutic value of the drug depends; if these be allowed to dry, their medicinal properties are lost by decomposition and evaporation; that this is true may be readily determined by comparison of a fluid extract of black haw with one prepared from the fresh, green bark; in the one instance the odor is only that common to all fluid extracts, while in the other it is one which is peculiar to the drug, and the clinical comparison is even more striking, the green drug preparation being one of the most efficient and reliable uterine sedatives which we possess, while that from the dry drug is practically inert. In other instances in which these elements are resinous in their nature, although in solution in the natural juices of the plant and at this time freely soluble in alcohol, they become hard and insoluble in even the most powerful solvents after the drug has been dried; this is well illustrated in the case of *stillingia*, which in the green condition readily yields its oleoresin to ether, but, which cannot be successfully manipulated when allowed to dry. Black cohosh also owes much of its therapeutic value to the contained resin, and clinical use has amply demonstrated the value, in chorea and rheumatism, of the green drug fluid extract, and at the same time has

proven the utter worthlessness of that from the dry drug.

Illustrative instances might be multiplied by reference to gelsemium, poke root, cotton root, veratrum viride, arbor vitæ, passion flower, and numerous others, but enough has perhaps been said to invite further investigation along this line.

Years ago Prof. F. Hoffman (Public Analyst of the State of New York) said: "The value of fluid extracts from fresh, undried material is acknowledged by all who have investigated the subject sufficiently to form an opinion, and if such fluid extracts could be prepared from a large variety of drugs it would be a great advantage. They should supersede other preparations from the dry drug, always of uncertain and uncontrollable value." And we quote Professor Bartolow as follows: "Disappointment is frequently experienced from the use of gelsemium preparations, owing to the fact that they are made from the dried root. In the process of drying, even spontaneously, the alkaloid disappears. The most trustworthy preparation is the official fluid extract, prepared conscientiously from the fresh root."

Professor Scudder is authority for the following: "I insist that all vegetable remedies should be prepared from the recent crude material obtained at its proper season. In some cases the remedy does not materially deteriorate within the year, and may be kept in stock until the next season for gathering. But in all cases it is better if prepared at once after gathering, and in many the preparation should be incision. The reasons are obvious; the medicinal properties are found in the

from the fresh article, before any des-juices of the plant, or stored in the cells, principally in the bark. In those cases drying removes the medicinal principles to a greater or less extent.

"The medicinal properties of plants are, to a considerable extent, complex and unstable organic bodies; and this, with its constant processes of change and decay, changes, deteriorates and finally destroys them."

The late J. Marion Sims, M. D., appreciated the value of the green drug fluid extract, and writing upon the subject of McDade's prescriptions said: "In making the fluid extracts there is great risk in getting a remedy less efficient than the original, because the manufacturer may use roots that have been kept too long and lost some of their active principles, while the decoction used on the plantations was always made of fresh roots just gathered from the woods. In making the fluid extracts, we should, therefore, be careful to have them made from roots recently gathered."

Fifth and Pike Streets.

PHOSPHO-GLYCERATE OF LIME AS A NERVE TONIC.

BY J. L. HATCH, M. D.

The phospho-glycerate of lime is a real tonic, not a mere temporary stimulant to the nervous structures, supplying the exhausted and enervated cells with phosphorus in exactly the same state in which it is naturally present in the human system. It is readily assimilable, and its administration never causes depression, even if continued for a long period. It stimulates the appetite, favors the assimilation of albuminoid substances, and of the phos-

phates in food, increases blood formation, improves metabolism and augments the excretion of nitrogen.

Of all the glycero-phosphates, which are stable neutral salts, the phospho-glycerate of lime is most suited for general therapeutic use, being a dry, white powder, more soluble at low than at high temperatures. It has a feebly alkaline taste, dissolves in 25 parts of cold water, and is insoluble in strong alcohol and in ether. In the dry state the pure salt can be kept for an unlimited time.

The physiologic action of phospho-glycerate of lime lies in the properties of glycero-phosphoric acid, which chemically is the glycerine ester of phosphoric acid with the formula $\text{PO}_4 \text{H}_2$, $\text{C}_3 \text{H}_5 (\text{OH})_2$. This acid and neurine form lecithin, while nucleinic acid is composed of quanin, pentose and a nucleine of glycero-phosphoric acid.

Glycero-phosphoric acid of lecithin is the basis of cell formation which is all important in the synthesis of proto-nucleins. It is abundant in brain and nerve tissue, egg yolks, blood and spermatozoa. Nucleinic acid, the principal component of pito-nucleins, is an organic phosphoric acid, built upon glycero-phosphoric acid.

Physiologic Action.—1. It accelerates metabolism generally, both as regards organic and inorganic substances.

2. It accelerates chiefly the nitrogenous exchanges and favors the assimilation of albuminoid substances increasing the excretion of nitrogen.

3. It does not greatly influence the formation of uric acid, but the increase in the nitrogenous elimination often lowers the proportion of uric acid to urea.

4. It acts on the sulphur metabolism, increasing the oxidation of the broken-up sulphur products.

5. It has no marked effect on intestinal fermentations.

6. It increases elimination of chloride of sodium, and hence this corresponds with the clinical fact of improved appetite.

7. It favors the assimilation of the phosphates in the food by the nervous system, exerting an economic action by saving up combined phosphorus.

8. It increases the exchange of osseous substance without materially influencing those of phosphorus.

The value of phospho-glycerate of lime was first brought before the notice of the French Academy of Medicine (April 29th, 1894) by Dr. A. Robin, who had been experimenting since 1888. His object was an attempt to influence the nutrition of the nervous structures of the body in a certain definite direction.

He was led to study its therapeutic value from the fact that in the course of his researches on neurasthenia, he found that certain patients excreted in their urine quite considerable quantities of incompletely oxidized phosphorus. And since the other nutritive conditions remained normal, he considered that this phosphorus must originate from a retrograde metamorphosis of the neuro-lecithin. For, as is well known, most of the imperfectly oxidized phosphorus appears as phosphoric acid; and phosphoric acid is an essential component of lecithin which plays so important a part in the structure of the nervous system.

From his experience he concludes that this salt can be usefully employed whenever it is desired to increase the

nutrition of the nervous structures and stimulate their activity.

Dr. Robin has used it with success in convalescence from influenza and other infectious diseases, in asthenic nervous maladies of various origins, in that form of neurasthenia that is characterized by the extremely rapid escape from the body of incompletely oxidized phosphorous, in cases of chlorosis when the carbonic oxidation was much decreased, in phosphatic albuminuria and in phosphaturia.

Dr. P. Pasqualis shows that phosphoglyceric acid passes into the blood as such, and is excreted with the urine as phosphoric acid.

Dr. K. Buelow states that the calcium salt is very readily digested, promptly passes into the circulation, and appears in the urine as phosphate.

20 November, 1902, New York City.

THE TREATMENT OF SEPTIC PROCESSES BY INTRAVENOUS COLLARGOLUM INJECTIONS.

BY DR. JAENICKE, OF APOLDA.

Abstracted from the *Deutsche Medicinische Wochenschrift*, Feb. 5, 1902.

Upon reception of a puerperal case in the local hospital, the following was noted:

Martha S., 19 years old, medium-sized, moderately well nourished. Temperature 98.8 degrees F., pulse 98, pelvic measurements normal. Foetal head transverse to the pelvic strait, large fontanelle to the right, cervix dilated to half dollar size, the edge being thinned, tense and rigid. Pains weak and ineffective, foetal heart sounds very faint. Labor began two days before, but had not progressed for 24 hours.

Several incisions were made into the

edge of the cervix; the pains improved slightly, but soon relaxed again, foetal heart sounds becoming weaker. Under anesthesia the head was with great difficulty brought down to the pelvic outlet in the transverse position and finally rotated into the oblique. Child deeply asphyxiated; marked post partum hemorrhage; various vaginal lacerations and one of the perineum to the second degree were carefully sutured. Thorough disinfection. ..

The first eight days post partum passed well, save for unimportant temperature variations. Catheterization for retention required from the first. On the ninth day chill and rise in temperature; right parametritis. Usual treatment together with Unguentum Crede instituted. Peritoneum became involved; abdomen greatly distended and very painful; constipation, vomiting; repeated chills. Patient rapidly grew worse; pulse miserable, hurried, hardly palpable and constantly varying. Complete anorexia, mental dullness and mild delirium.

Slight temperature fall by antipyretics and hydriatic measures; but it soon rose again to 104.7 degrees F. Pulse hardly perceptible. 30 grains antipyrin in 12 hours only reduced temperature to 103.3 degrees F. Facies abdominalis; general condition extremely bad.

On 19th day after admission 2 drams of a 1 per cent. sterilized Collargolum solution were injected with antiseptic precautions into a superficial vein of the right elbow. Two hours later chill and temperature rise to 104.8 degrees F. Exudate hard and firm, reaching as high as navel. Per vaginam a hard, non-fluctuating swelling was plainly palpable on right side. Restless

night. Next day slight temperature fall; patient complained much of pain in right arm; otherwise condition unchanged.

Thirty-six hours after injection marked fall to 100 degrees F. and on the following day to 96.8 degrees F. Pulse 96, very weak, but plainly palpable. Pains in right arm increased, extending from fingers to shoulder; nothing visible externally. There was neither redness nor swelling, yet patient cried out at least touch; arm seemed entirely paralyzed. Limb elevated and ice-bags applied.

The exudate retrogressed visibly and three days after injection there was complete apyrexia. The mass had entirely disappeared, the abdomen was soft and painless; all that could be found of the effusion were some indurating bands very deeply situated. Arm and shoulder still tender to pressure. On this day temperature rose again; there was pain and swelling of the left leg and a venous thrombosis developed which by the next day spread to the middle of the thigh. 11 days after Collargolum injection she left bed completely cured.

This case shows nothing unusual until Collargolum was injected. It is the ordinary history of a septic parametritis due to parturition injuries, and the prognosis was extremely unfavorable; this opinion was fully shared by a colleague, Dr. Roehler, and by the experienced head nurse.

Dr. Jaericke has long highly prized Unguentum Crede; and the various communications he saw concerning the intravenous use of Collargolum incited its employment by him. The result was certainly striking. Though fever did not diminish much during the fol-

lowing day, it ceased in 36 hours and would certainly not have reappeared but for the venous thrombosis occasioned by the shocking debility of the entire organism. And this thrombosis vanished with a remarkable rapidity and completeness. Most marvelous of all was the almost magical disappearance of the exudate. The supposition that perforation into rectum, vagina or bladder took place can be entirely excluded; the secretions and excretions were carefully watched for such an occurrence. Neither Dr. Rohler nor the author can recollect having ever seen such rapid absorption under any other method of treatment.

The pain in the arm was the disturbing factor. It may possibly be that part of the fluid was not injected into the vein and escaped into the subcutaneous connective tissues, patient being very restless during the process. At all events, there was no permanent local ill-effect.

Whatever theory we may have as to the mode of action of Collargolum, the fact remains that an entirely hopeless case of septic parametritis was defibrilized in 36 hours and an exudate the size of a child's head was entirely resolved in 4 1-2 days by a single injection.

HYDROTHERAPY IN PNEUMONIA.

Brieger (*Zeitschrift fur dietatische und physikalische Therapie*, Vol. V., Heft. 1) says that a rational system of combating pneumonia by means of hydrotherapy can only be perfected by a knowledge of the biological characteristics of the bacterium which causes the disease. The theoretical action of hydrotherapy in pneumonia due to the

invasion of various germs is the destruction of toxins, the promotion of the formation of antitoxins, the multiplication of leukocytes, and the presence of a greater amount of water in the blood—in other words a cure by the methods of Nature. The author says that, inasmuch as pneumococci and streptococci are found in the blood in severe cases, these should be regarded as instances of sepsis, and should therefore, be treated accordingly, *i. e.*, by means of baths, douches, alcohol, etc. Too cold baths, however, will drive the bacteria in the blood into the internal organs, and thus destroy the latter rapidly. In this way we may explain the symptoms of collapse following the very cold baths that are given by some clinicians. Yet cold baths, in virtue of their stimulation to the processes of oxidation, destroy the toxic substances that thus circulate in the blood, provided, of course, that the inflammation has not involved a large portion of the lung. As the critical perspiration brings on the lowering of the temperature, it is well to promote this event by the use of mild hydrotherapeutic methods, such as the use of warm baths, and in children the dry pack is of great value and is well borne even by the weakest ones. In adults these procedures are not well applicable, as they are very uncomfortable under this treatment. In old persons they should be avoided, as they may be even dangerous. In such cases packs about the breast with room-temperature water are of benefit, and these are specially applicable in cases that complicate influenza. During the packs the patient should receive warm drinks and a moderate amount of alcohol.—*New York Medical Journal.*

BOOK REVIEWS.

A System of Physiologic Therapeutics, Eleven Octavo Volumes. Edited by J. Solis Cohen, A. M., M. D. \$22.00 net. P. Blakiston Son & Co., Phila.

Volume Five, 539 pages, treats of Prophylaxis, Personal Hygiene, Civic Hygiene, Care of the Sick. By Prof. Joseph McFarland, M. D., Medico Chirurgical College; W. Wayne Babcock, M. D., Medico Chirurgical College; Albert Abrams, A. M., M. D., San Francisco; Henry Leffman, M. D., Philadelphia.

This volume, replete with illustrations, is one of the most interesting of the series thus far issued. It requires very careful study, as every page teems with items of vital importance to the physician and the physiologist. To enumerate even a tithe of the good things to be found in this book would completely fill our pages. By all means get the set if only for this one volume.

W. H. W.

A VALUABLE HAND BOOK FOR PHYSICIANS.

We have received from the hands of the publishers, The Medical Council, 4105 Walnut Street, Philadelphia, a copy of "Practical Gynecology, Obstetrics and the Menopause," by Dr. A. H. P. Leuf of this city, the three parts complete in one volume of 326 pages.

In submitting the work for review, the publishers call attention to the fact that the "book is not a theoretical disquisition, but is the result of years of actual practice, and on that account embodies very largely the personality of the author." A careful reading of

the work fully sustains the truthfulness of this statement and shows plainly that it has been the author's earnest endeavor to give plain and practical directions to the physician seeking guidance in its pages. That he has not fallen short of his endeavor we are fully prepared to affirm.

The following extract from the Preface gives the true key to the work: "A treatise upon any subject should be more than a mere dictionary of terms and methods; it should teach principles and their application; should indicate lines of thought; should stimulate investigation." Dr. Leuf's work is and does all this. In Part I under the head, "The General Practitioner His Own Gynecologist," the author shows plainly the great value to the family physician of a thorough knowledge of the science of Gynecology, and argues its reasonably easy attainments, urging the practitioner to do his own work in diseases of women, rather than refer his patients to specialists for minor work that he could better do himself. After detailing the simple and inexpensive instrumental outfit required, the author in direct, plain and concise words takes up examinations, Diagnosis and Treatment of diseases of women in proper sequence, giving only the practice which in his own hands has been most successful; and which can be used as a working guide to the physician in his daily practice.

In Part II, under the head of "Common Sense in Obstetric Practice," the author, after showing vividly the importance of the doctors being thoroughly prepared in the technique of obstetrics, goes on to speak of the Requisites to Success in Obstetric Prac-

tice; Diagnosis of Pregnancy; Care of Pregnant Women; Preparation for Labor; Diseases of Pregnancy; The Various Stages of Labor; Duty of the Obstetrician after Labor; and Obstetric Operations, concluding with a very complete chapter on The Child.

In Part 3, under the head of "The Change of Life in Women," Dr. Leuf does much to relieve this too much misunderstood subject of the mystery with which it is invested, showing the plain physiologic laws by which these supposed mysteries are explained, leading naturally up to their logical and successful treatment. We feel safe in saying that, aided by this work, the average physician will be enabled to guide most of these cases safely through this trying epoch to the final establishment of even better health than they have previously enjoyed.

These three subjects, most appropriately grouped as they are in one volume, form a desk companion to the physician of inestimable value to him in his treatment of female patients in all the conditions and emergencies peculiar to the sex.

J. R. C.

PAMPHLETS AND REPRINTS RECEIVED.

Report of Twelve Operations on Infants and Young Children During Spinal Analgesia. By William Seaman Bainbridge, A. M., M. D., New York.

The Doctor gives the preference to Cocaine in these operations, over Eucain and Beta-Eucain. The reports given by Dr. Bainbridge are exceedingly interesting, and from his experience he concludes that spinal analgesia, by the use of Cocaine, is applicable to

children of all ages, without any serious after effects.

Periduodenal Abscess Secondary to Ulcer of the Duodenum. *Ibid.*

A Report of Two Cases of Cancerum Ovis. *Ibid.*

Preliminary Report on Argyrol, in Gonorrhœa Infections. By Bransford Lewis, M. D., St. Louis.

A Clinical Report on the Use of Argyrol (Silver Vitelline) in Diseases of the Nose, Throat and Ear. By M. D. Lederman, M. D., New York.

New Facts About Argyrol. Barnes and Hille, Philadelphia.

Aconitine in Acute Inflammation of the Respiratory Tract of Children. By John M. Shater, M. D., Chicago.

Therapeutic Index. Adapted to the Manual of Physiological Cell Medication. By John Aulde, M. D., Kennett Square, Pa.

W. H. W.

OPHTHALMOLOGY.

Dr. J. H. Woodward (*N. Y. Med. Jour.*) advocates stretching the over-acting muscle, instead of performing a tenotomy, while he advances its antagonist. Without this stretching sutures do not hold well.

At the last meeting of the N. Y. Medical Society Dr. Lucien Howe explained the headache and other neuroses attendant upon eyestrain upon the theory of accommodation offered by Tscherning, who holds that accommodation is not as passive an act as Helmholtz believed it to be.

Dr. Henry C. Haden (*Phil. Med. Jour.*) cites two cases of retinal hemorrhage associated with high arterial tension accompanied by albuminuria,

and believes the condition is significant of beginning widespread arterial degeneration. By care he thinks the patient's life may be greatly prolonged.

Dr. Walter Evre Lambert (*Med. Rec.*) excluded 13 per cent. of the children in 36 schools inspected, on account of contagious eye diseases, principally trachoma. At present no provision is made for the education of these unfortunates in separate institutions, but each one is excluded from school privileges.

The blind in Illinois will ask from the legislature a law providing that every blind person not cared for by a charitable institution, and who has resided in the State for five years, shall receive the sum of \$150 annually. After leaving an institution for the blind, no provision is now made for the unfortunate ones, and those unable to find employment are thrown upon their friends, almhouses or charity.

Dr. Francis Valk, at the last meeting of the N. Y. Medical Society, held that the ophthalmoscope would come into more general use by the general practitioner if he were taught to overcome the difficulties of the instrument, which are easily surmounted. The pupil may be opened with cocaine without inconvenience to the patient, and with plus or minus lenses the fundus of the eye may easily be seen.

At the same meeting Dr. Edgar S. Thomson asserted that a two per cent. solution of nitrate of silver is the best remedy for purulent ophthalmia in the adult. In ophthalmia neonatorum a six per cent. solution of protargol is good, because it is efficient and nonirritating, but it is decidedly inferior to silver nitrate for gonorrhœal ophthal-

mia. Boric acid solution should be used constantly to keep the eye free from discharge.

Dr. Geo. J. Bull (*N. Y. Med. Journal*) cured astigmatism amounting to 1.75 D. in the left eye by tenotomy of the external rectus. The corneal curve was greatest in the horizontal meridian. There was an exophoria of six to eight degrees. The tenotomy caused the astigmatism to disappear, and raised the vision from 6-18 to 6-5. He thinks that inverse astigmatism may be the cause of glaucoma, by disturbing the ocular muscle balance.

Dr. Ellice M. Alger (*Med. Rec.*) calls attention to the importance of distinguishing between trachoma and follicular conjunctivitis, in view of the regulations excluding foreigners affected with trachoma from school privileges. Trachoma is hypertrophy of conjunctival tissue. Follicular conjunctivitis gives no subjective symptoms, is usually noncontagious, and disappears eventually without treatment. Dr. A. uses three times a week Iethyol 15 minims, Tinct. Iodin 1 fluid drachm, Glycerine, one fluid ounce with a solution of zinc sulphate on alternate days at home.

Dr. J. Wilkinson Jersey (*Med. Rec.*) thinks that senile cataract is caused by irritation of the lens capsule from the movements of a stiffened and roughened iris, caused by the nutritional changes incident to old age. He thinks there is much evidence to support Schoen's view, that all simple and senile cataracts commence as capsulitis. The effect of trituration of the lens in ripening cataracts he cites in support of this theory. He suggests nicking the sphincter of the iris

when the opacification is in its earliest stages, to arrest the process.

THERAPEUTIC MEMENTO.

A few years ago Prof. Armand Gautier called the attention of the medical profession to the results which might be obtained "In Repairing Organic Losses" by employing any substance in which "Phosphorus Could be Found in a State Similar to That in Which We Find It in Lecithine."

The lecithines are known to be organic phosphorous compositions which are found in animal and vegetable tissues, they are also known to exist in a natural state in the blood, in the nerve substance, in the yolk of egg, sperm, fish milt, etc.

Lecithine which has recently been introduced into therapeutics is extracted from the yolk of egg and is composed of stearic lecithine.

The experiments of Desgrez and Ali Zaky, of Gilbert and Fournier, of Lancereaux and others, have thoroughly proven that the administration of lecithine brings about a notable improvement in the appetite and an increase of weight, as well as an augmentation of strength and a general improvement in the patient's condition.

Lecithine should then be classed among medicines which produce the most favorable effect on nutrition; consequently this medicine becomes useful in a wide range of cases and in all those pathological states in which organic losses take place, such as general debility, rachitis, tuberculosis, diabetes, phosphaturia and neurasthenia.

Lecithine may be prescribed in three distinct forms: 1st, Pills Clin, contain-

ing natural lecithine, chemically pure (2 to 5 pills per day), 2nd, Granulated Clin, which is of very easy administration and possesses an agreeable taste, making it very convenient to give children (1 to 2 teaspoonfuls for children and 2 to 5 for adults), 3rd. Solution Clin, for intra-muscular injections (1 injection every other day.)

These various preparations are of an absolute purity and possess a perfect stability, being compounded with scrupulous care, they provide the physician with an efficacious remedy which enables him to obtain uniformly favorable results. It is a matter of congratulation that therapy has made this new acquisition.

E. Fougera & Co., Agents, New York.

Treatment of Cyclic Vomiting in Children.

Hand (*Proceedings Philadelphia County Medical Society*, September, 1902) found good results follow the use of salt water in the treatment of cyclic vomiting in children. The children drank a solution made of 1-2 teaspoonful of salt in a glassful of water readily. He thinks that the cyclic vomiting is due to the elimination of some poison through the stomach mucous membrane. In searching for a substance that would tend to abort attacks, he decided to try milk of magnesia. In one patient 2 teaspoonfuls of this preparation was given every half hour until the bowels moved as soon as the first act of vomiting occurred. He believes attacks of cyclic vomiting were aborted by this means in the case reported.—*Phila. Med. Jour.*

QUICK AND SURE AND TIME TRIED.

No doubt many of our doctor friends will recognize in the following, from Chas. B. Forsyth, M. D., (Bellevue Hospital Medical College, New York City), dated Alexandria Bay, N. Y., January 6th, 1903, an expression which will, in many instances, recall their own experience. He says: "I can say no more than that I have used Antikamnia Tablets since I began practicing medicine. Several times I have switched to other preparations, but I invariably come back to Antikamnia Tablets, when I want quick and sure results."

The Antikamnia Chemical Company, St. Louis, Mo., is an old and responsible concern, and any of their medicinal specialties may be depended upon, to be just as represented. The latest additions to their list of preparations are "Antikamnia & Heroin Tablets" and "Laxative Antikamnia & Quinine Tablets." Send to them for samples, mentioning THE MEDICAL TIMES AND REGISTER.

No great thing is created suddenly, any more than a bunch of grapes or a fig. If you tell me that you desire a fig, I answer you that there must be time. Let it first blossom, then bear fruit, then ripen.—*Epictetus.*

Dirt is the omnipresent and incessant foe to human life, happiness and longevity. Against it lieutenant-general cleanliness and admiral antisepsis led the reorganized and newly-weaponed army and navy of attack and invasion.

There is always hope in the man who actually and honestly works. In idleness alone is there perpetual despair.—*Carlyle.*

Azzurrini (*Lo Speriment.*, An. 56, f. 5, 6) discusses the changes met with in the spleen in the common hepatic cirrhosis of drunkards. It has long been known that the spleen is enlarged in these cases. It is also known that in Banti's disease there is enlarged spleen with hepatic cirrhosis, but the changes in the spleen are not the same. In the ordinary hepatic cirrhosis the splenic changes are localized chiefly in the splenic pulp, and consist in a dilatation of the veins and lacunar spaces, whilst the follicles are altered secondarily by a dilatation of their capillaries. The reticulum unless the disease is of long duration, is not increased. In Banti's diseases the alterations are primarily and chiefly localized in the Malpighian corpuscles, whilst the dilatation of the veins either fails entirely or is very little marked. The reticulum, on the other hand, is distinctly enlarged. The

author's conclusions are derived from a study of twenty cases of ordinary hepatic cirrhosis—three early, fourteen moderately severe, and three very severe. Broadly speaking, the changes seen in the spleen correspond to those which are seen in cases of stasis, and are as follows: (1) Dilatation of the veins and cavernous tissue of the splenic pulp, due to accumulation of red corpuscles; (2) dilatation of the capillaries of the Malpighian follicles, proceeding from the periphery to the central artery, escape of blood, and disassociation of the cellular elements constituting the follicle; (3) thickening of the capsule, trabeculae, and adventitious sheaths of the veins; (4) destruction of the red corpuscles above the normal; (5) degenerative changes in cellular elements of the splenic pulp, ending in granular breaking up of the same.—*British Med. Jour.*, Feb. 14, 1903.

No physician can afford to be indifferent in the filling of his prescriptions.

CONTENTS.

Original:	Page
The Second Sight	97
An Effective Treatment for Septic Endocarditis	101
The Medicinal Treatment of Pulmonary Tuberculosis.....	106
A Brief History of the Therapy of Various Forms of Light and Radio-Therapy	108
Nasal Catarrh, Fibroid and Mucous Polypus:.....	115
 Editorial:	
Farming in the City.....	116
 Miscellaneous:	
Green Drug Fluid Extracts.....	117
Phospho-Glycerate of Lime as a Nerve Tonic.....	119
The Treatment of Septic Processes by Intravenous Collargolum Injections.....	121
Hydrotherapy in Pneumonia	122
Book Reviews.....	123
Pamphlets and Reprints Received	124
Ophthalmology	125
Therapeutic Memento	126
Treatment of Cyclic Vomiting in Children	127
Quick and Sure and Time Tried	127